

EXPLANATION OF PLATE II.

- Fig. A. *Dichelaspis Hoeki*, sp. n. A group *in situ* on one of the oral appendages of a Palynurid, magnified.
- Fig. B. *t.*, tergum of another specimen, magnified; *n.s.*, natural size of the single specimen.
- Fig. C. Mouth and cirri of another specimen.
- Fig. D. *t.*, tergum of another specimen; *c.*, base of carina of the same; *c.a.*, caudal appendage and base of sixth pair of cirri of the same.
- Fig. E. *Dichelaspis antiquæ*, sp. n. A single specimen, magnified. *n.s.*, natural size of the same.
- Fig. F. *c.*, base of the carina of another specimen; *c.a.*, caudal appendage and base of sixth pair of cirri of the last-mentioned specimen.
- Fig. G. Young specimen of *Dichelaspis antiquæ*, magnified; *n.s.*, natural size of the same; *sc.*, scutum of the young specimen, more highly magnified; *t.*, tergum of the same.

V.—Notes on *British Spiders*, with Descriptions of new Species. By the Rev. F. O. PICKARD-CAMBRIDGE.

[Plates III. & IV.]

SINCE my last communication of January 1894 several new species have been added to the British fauna, three of them being, so far as I am aware, hitherto undescribed. Of these three species, here described as new to science, one (*Lycosa spinipalpis*) is a large spider belonging to the group *Trochosa*, and forms a very fine addition to our list. *Pardosa purbeckensis* is also a large species allied to *palustris*, Linn., and nearly as large as *P. amentata*, Clk. The third (*Agræca littoralis*) is one of the smaller of the "*Agræcas*," and, although M. Simon and Prof. Kulcznski have each described a very closely allied species, it is, I believe, different from either.

In any case it is better to describe such as new, rather than attach it doubtfully to some species which may afterwards prove to be quite different.

I have been able, thanks to the kindness of the Rev. O. Pickard-Cambridge, Mr. W. Evans, Mr. G. H. Carpenter, and Mr. C. Warburton, to examine nearly all the examples of the genus *Tetragnatha* which have been taken in England, Ireland, and Scotland, and, as the result of my examination, am able to add four species of this genus to the British list.

Pardosa riparia, C. L. K., drops out of our list for the present, while another species of *Leptyphantes*—closely allied to *tenuis*, Bl.,—*L. tenebricola*, Wid., has been added.

Including, then, only those species which are described or recorded in this paper, we have three species new to science and seven species added to the British list.

Through the courtesy of Mr. W. A. Luff, of Guernsey, I have been enabled to draw up a list of the spiders of the Channel Islands, which will be published in the 'Transactions of the Guernsey Society of Natural Science and Local Research.'

This list will include the names of all species recorded from the year 1863 up to the present time, with localities, the names of the captors, or the authority who vouches for the occurrence of each species.

Though not geographically, nor even geologically, really connected so closely with the British Islands as with the coast of Normandy, it has been deemed advisable to include the Arachnid fauna of these islands in a list supplementary to that of Great Britain.

There are at present 116 species recorded, while one only of these (*Heliophanus Cambridgei*, Sim.) has not been hitherto found on the English side of the Channel.

Several new species have been added to the list by Messrs. Warburton, Luff, and others, noticeably *Salticus formicarius*, Wlk., *Scytodes thoracica*, Latr., and *Asagena phalerata*, Panz.

*Three Species new to Science and Seven new to the
British List.*

Genus *AGRÆCA*, Westw.

Agræca littoralis, sp. n. (Pl. III. figs. 15, a, b, c, d, e.)

Length of adult female 6 millim., or $2\frac{3}{4}$ lines.

Cephalothorax, caput, legs, and sternum pale orange. Abdomen dull brown, with three narrow pale bands converging towards the spinners.

Cephalothorax oval-elongate, with two dusky bands on either side of the deeply indented central stria, formed by suffusion of the lateral striæ.

Eyes small, occupying a transverse oblong area. Posterior row curved, convexity backwards; eyes equal, equidistant, rather more than one diameter apart. Anterior row strongly curved, convexity backwards, occupying a narrower transverse space than the posterior row, almost equidistant; centrals much smaller, a quarter of a diameter apart. Ocular area set with curving black bristles. All eight eyes situate on black spots.

Clypeus very narrow, equal to the diameter of central anterior eyes, its margin set with six or seven curving bristles.

Falces broad, stout, convex, conical, clothed with curving black hairs. Inner margin set with numerous curving hairs; upper margin of fang-groove bearing three teeth, lower margin with two.

Palpus set with stout black spines, bearing at apex a dark simple tarsal claw.

Maxille twice as long as labium, broad, parallel-sided, very slightly enlarged and obtusely truncate at apex; fringed with curving bristles and bearing a denser tuft of finer hairs on inner anterior margin and a small black tuft at apex.

Labium oval-quadrate, truncate at apex; fringed with dark bristles.

Sternum slightly longer than broad, convex, clothed with dark hairs, truncate in front, produced behind to a point between the coxæ of posterior pair of legs.

Legs 4, 1, 2, 3, fairly long, clothed with dark hairs. Anterior pairs less spinose.

Femora i. with 2 dorsal, 1 anterior-apical, and 1 dorsal-apical spine.

Femora ii. with 3 dorsal spines.

Femora iii. with 3 dorsal and 3 apical spines.

Femora iv. with 2 dorsal and 3 apical spines.

Patella of all four pairs with a single basal and apical spine.

Tibiæ i. with two pairs of stout spines beneath. *Tibiæ* ii. with two spines 1—1 beneath.

*Protarsi** i. and ii. with two pairs of spines beneath. *Tibiæ* and *protarsi* iii. and iv. with numerous spines on all sides.

Tarsal claws two. *Onychium* bearing a few upturned bristles, but no claw-tuft.

Abdomen oval-elongate, compressed, parallel-sided, thinly clothed with fine dark hairs; dull brown, with a narrow, pale yellow, central dorsal band extending from the base nearly to the spinners, flanked by a pale irregular band, extending from base and converging to the spinners. Ventral area pale yellow. Spinners short, cylindrical, situated in a quadrangle. Superiors slightly longer and further apart; inferiors set one diameter apart at base, having in front of them a lunulate

* Mr. R. I. Pocock, of the Natural History Museum, South Kensington, has suggested *protarsus* instead of *metatarsus*; and, seeing that we enumerate the joints from the basal end and arrive at the sixth joint before the seventh (tarsus), the term *protarsus* seems to describe the joint and its position better than the old term *metatarsus*.

transverse orifice, fringed with hairs, marking the opening of a spiracular vessel.

Epigyne not conspicuous, consisting of a narrow longitudinal fissure, slightly dilated in front, flanked on either side posteriorly by a dark suffused spot. Epigynal area convex, clothed with fine hairs.

M. Simon describes (Ar. de France, vol. iv. p. 308) a single young female of a species (*A. lineata*), which seems very closely allied to the above; while Prof. W. Kulcznski, of Crakow, also describes and figures a species, *A. striata*, Kl. (Ar. Nov. in Montibus Tatricis, 1882), which is certainly very similar. Unless, however, a comparison of types confirms this supposed identity, I shall believe them to be distinct.

An adult female was taken by myself from beneath a stone at Swanage, on the undercliff near Durlstone Head, on May 22, 1894, while immature specimens were taken under stones on the foreshore near Kimmeridge a little later in the year.

Genus LYCOSA.

(*Trochosa*, *Tarentula*.)

Lycosa spinipalpis, sp. n.
(Pl. III. figs. 4, 5, 9, 11, 14.)

Length of male 8 millim. Female, ceph. 4 millim., abd. 6 millim. or $4\frac{1}{2}$ lines.

Cephalothorax deep umber-brown, having a central pale band, formed of golden-yellow pubescence, which extends from the posterior row of eyes to the base of the thorax; within this band at its anterior portion lies a pair of brown longitudinal bars, sometimes connected with the lateral brown areas, sometimes entirely disconnected. Ocular area brown, with a pale patch on either side. Falces deep brown.

Abdomen oval, enlarged towards the spinners, deep brown, with a short central, dorsal, anterior, longitudinal bright pale bar, formed of golden-yellow pubescence, margined with black, and followed to the spinners on either side by a series of small pale spots. Lateral areas thickly speckled with spots of golden-yellow pubescence.

Sternum deep brown.

Legs 4, 1, 2, 3, olive-brown, clothed with golden pubescence. Femora more or less decidedly annulated with dusky black, as also are sometimes the tibiæ, especially in the male sex.

The spinous armature of the legs is as follows:—

Femora i.—2 dorsal, longitudinal; 2 lateral, anterior, apical spines.

Femora ii.—2 dorsal, longitudinal; 1 lateral, anterior, apical spine.

Femora iii.—3 dorsal, longitudinal; 2 lateral, anterior, apical; 1 lateral, posterior, apical spine.

Femora iv.—3 dorsal, longitudinal; 2 lateral, anterior, apical; 1 lateral, posterior, apical spine.

Patella i. and ii., no spines; iii. and iv., 1 posterior central, 1 anterior central spine.

Tibiæ (beneath only) i.—3 pair ventral, longitudinal; 1 anterior, lateral, apical spine.

Tibiæ ii.—3 pair ventral longitudinal (2 rudimentary anterior); 2 lateral, anterior, apical spines.

Tibiæ (above and beneath) iii. and iv.—3 pair ventral, longitudinal; 2 lateral, anterior; 2 lateral, posterior; 1 dorsal, apical spine.

Protarsi (beneath only) i. and ii.—3 pair ventral, longitudinal; 1 ventral, apical; 1 anterior, lateral, central spine.

Protarsi iii. (above and beneath).—3 pair ventral longitudinal; 1 ventral apical; 3 anterior lateral; 3 posterior lateral spines.

Protarsi iv.—8 ventral spines; 3 anterior lateral; 3 posterior lateral spines.

Falces of male similar in general respects to those of *terricola*; no tooth on outer margin of fang near base.

Palpus of male similar in general respects to that of *terricola*, but the radial joint or tibia bears on the inner underside in front a cluster of 12 to 16 stiff, almost straight, stout spines. The tarsal or digital joint has no claw at its apex.

This fine species, apparently new to science, may be readily distinguished in both sexes from the other three species of *Lycosa*, to which it is allied, by its umber-brown hue and pale-speckled abdomen; in the male sex by the cluster of spines beneath the radial joint on the under and inner side.

In the female sex by the epigynal area, which is longer than broad, while the whole area is larger in proportion than that of any of the others, save *terricola*; but in *terricola* the area is broader than long, semicircular.

There is no difficulty whatever in recognizing the males of this species, though it might not be altogether easy to separate the females if they had lost their colour at all. But if it be borne in mind that this species, *robusta*, and *ruricola* exhibit the short pale wedge-shaped bar on the abdomen at base, and that the epigynal area of *ruricola* is very small and incon-

spicuous, while *robusta* is a much larger spider with hoary grey pubescence, there will not be any great fear of a confusion of the three species.

This fine new addition to the British fauna was first met with at the head of Lake Derwentwater in June 1893, where a male and female were taken from beneath a stone. In May 1894, however, numerous examples were obtained under boards, bricks, &c., in damp meadows in Dorset.

The female makes a small cell in the damp earth for the spinning of the egg-cocoon, as do most of the other species of *Lycosa*. I have not received any from other parts of England, but have no doubt that it is abundant in suitable localities throughout the country.

Lycosa robusta, Sim. (Pl. III. figs. 3, 8, 11, 12.)

Length of male, ceph. 5 millim., abd. 5 millim. or $4\frac{1}{2}$ lines; female, ceph. 7 millim., abd. 8.75 millim. or 7 lines.

Pubescence hoary white. Abdomen with pale lanceolate mark. Size variable, but much larger than *L. spinipalpis*. Palpus of male with an apical tarsal claw. Tarsi of first pair of legs of male fusiform, incrassate, clothed with rich black pubescence.

Fang without any tooth on outer margin.

Numerous specimens of this fine addition to the British fauna were taken beneath stones on the undercliff at Swanage, between Durlstone Head and Peveril Point; also under stones in the ravines behind the lighthouse. They construct a large cell in the damp loam, sometimes 2 inches long by 1 broad, and therein construct the immense white egg-cocoon, hatch and tend the young ones. A dozen or more females were taken, but only one adult male, in May 1894 by the author.

Lycosa ruricola, De Geer.

(Pl. III. figs. 1, 6, 10, 13.)

Length of male, ceph. 4 millim., abd. 4 millim. or $3\frac{1}{2}$ lines; female, ceph. 6 millim., abd. 9 millim. or $4\frac{1}{2}$ to $6\frac{1}{2}$ lines.

Pubescence yellow-grey. Abdomen with pale lanceolate mark. Size very variable, but smaller than the preceding species. Palpus of male with an apical tarsal claw. Tarsi of first pair of legs of male cylindrical, slender. Fang with a tooth on outer margin.

Not uncommon in Dorset and other parts of England. Adult in May and June.

Lycosa terricola, Th. (Pl. III. figs. 2, 11, 14.)

Length of male 3.5 millim., abd. 3.5 millim. or $3\frac{1}{4}$ lines; female, ceph. 5 millim., abd. 7 millim. or $5\frac{1}{2}$ lines.

Pubescence yellow. Abdomen with no pale lanceolate mark. Size very variable, but smaller than *L. ruricola*. Palpus of male without any apical tarsal claw. Protarsi i. incrassate. Fang without any tooth on outer margin.

Common in most parts of England. Adult in May and June.

The following table will perhaps be of some assistance to students :—

Males.

- A. Palpus of male bearing a claw at the apex of the tarsal joint. Protarsus i. slender (*ruricola* only).
 - 1. Fang of falces with a small projecting angle or tooth on the outer margin near the base. Tarsi i. cylindrical, slender *ruricola*, De Geer.
 - 2. Fang without angular projection. Tarsi i. fusiform, incrassate *robusta*, Sim.
- B. Palpus of male without any claw at apex of tarsal joint. Protarsus i. incrassate.
 - 1. Tibia (radial joint) of palpus bearing seven or eight stout spines on the under and inner side at apex *spinipalpis*, F. Cb.
 - 2. Tibia of palpus without spines, a few hairs merely *terricola*, Thor.

Females.

- A. Abdomen with pale basal, central, dorsal lanceolate band.
 - 1. General hue olive-brown. Cephalothorax with yellow-grey or hoary-white pubescence. Size larger. Epigynal area smaller.
 - a. Pubescence hoary white. Epigynal area a little larger, with two stout tubercles at base on either side. Average size much larger.. *robusta*, Sim.
 - b. Pubescence yellow-grey. Epigynal area smaller, tubercles inconspicuous. Average size smaller..... *ruricola*, De Geer.
 - 2. General hue deep umber-brown. Cephalothorax with golden-brown pubescence. Size smaller. Epigynal area larger *spinipalpis*, F. Cb.
- B. Abdomen often with a basal, central, dorsal dusky-outlined lanceolate band; but its area is not paler than the rest of dorsal area. Epigynal area broad, conspicuous, dark red-brown, almost semi-circular *terricola*, Thor.

The males can be recognized without any difficulty whatever, the palpi and the first pair of legs together furnishing most reliable characters. But I am unable to speak so confidently as to the distinguishing features of the females, though I fancy one might with accuracy determine the

identity of freshly caught specimens with the help of the above characters. The form of the epigyne varies so much in different specimens of the same species, that one will not be inclined to place too great reliance upon any characters furnished by it.

The teeth on the upper and lower margins of the fang-groove might, if constant, furnish good characters.

Synonymy.

Lycosa robusta, Sim. 1876.

Trochosa robusta, Kulcz. 1892.

Lycosa ruricola, De Geer, 1778.

Lycosa campestris, Bl. 1861.

Lycosa ruricola, Sim. 1876.

Trochosa ruricola, Cambr. 1881, Thor. 1872, Kulcz. 1892.

Lycosa terricola, Thor. 1856.

Lycosa agretyca, Bl. 1861.

Trochosa terricola, Thor. 1872, Cambr. 1881, Kulcz. 1892.

Lycosa terricola, Sim. 1876.

Genus PARDOSA.

(*Lycosa*.)

Pardosa purbeckensis, sp. n.

(Pl. IV. figs. 1, 4, 7, 8, 9.)

Male, ceph. 3.25, abd. 3.5 millim. or 3 lines; female, ceph. 4, abd. 5.5 millim. or 4½ lines.

Cephalothorax deep sienna-brown, clothed with sooty-black pubescence, having three narrow, longitudinal, bright yellow stripes—one in the centre extending from the caput, where it is attenuate, to the base; the others lying one on either side near the margin, extending from the clypeus to the base.

Falces bright yellow, having a central basal and lateral basal brown streak; the inner and apical margin is also brown.

Legs very long, brown on the upperside, spotted and streaked with black, bright yellow beneath; furnished with long spines and black hair. Protarsi i. in the male are furnished on either side with numerous very long, stiff, oblique bristles. In both sexes the legs are very hairy.

Abdomen deep brown, clothed with sooty-black pubescence and hairs, having an indistinct paler, lanceolate, dorsal central bar at the base, the pale hue being continued, though scarcely

perceptibly, to the spinners. Ventral area black, with a central series and two lateral series of dull pale guttulæ.

Sternum deep sienna-brown, with a pale lozenge-shaped central disk.

Epigyne of female consisting of a large red-brown, shiny, chitinous plate, narrow in front, springing from a transverse oval chitinous cup, dilating posteriorly, forming a large triangular plate, whose posterior angles are produced and slightly procurved. The posterior margin is often a little emarginate, and a broad furrow or depression runs through the middle.

This portion of the structure is exceedingly variable. It is impossible to give a figure which will represent all the forms, differing somewhat as they do in every specimen.

The same variability is noticeable also in the females of the closely allied species, *monticola* and *palustris*.

Palpus of male large. Femoral joint black at base, pale yellow at apex; patella pale yellow; tibiæ black, clothed with long hairs; tarsus deep black, clothed with black hairs, very large (larger in proportion even than in *palustris*), furnished with a claw at apex. The bulbous process at the base of the organs is very prominent, and the organs differ in character from those of closely allied species. It is, however, so difficult to examine this structure that, since there are other infallible characters for determining the identity of the species, it is scarcely worth while to make a very elaborate analysis of them.

This fine *Pardosa* belongs to the group which includes *herbigrada*, *monticola*, and *palustris*. There is, in reality, no difficulty in distinguishing them from each other.

This species, one of the largest of the "*Pardosas*," was exceedingly abundant on the western shores of Poole Harbour in May 1894. They were found very close to the water's edge, lurking beneath the rushes, running swiftly over the herbage during gleams of sunshine. The long hairs on the legs give them quite a feathery appearance, even when running, while the large size and black colour render them very distinct from any other species of the genus. Though more nearly resembling in general appearance *palustris*, yet the form of the epigyne and the slender tarsi of the first pair recall rather *monticola*, while *palustris*, not indeed in general appearance, but both by the form of epigyne and by the dilate tarsi, seems more nearly allied to *herbigrada*.

Pardosa purbeckensis, var. *minor*, F. Cb.

Length of male 5 millim. or $2\frac{1}{4}$ lines; female 5.5 millim. or $2\frac{1}{2}$ lines.

In April 1893 I met with numerous specimens of a spider closely allied to *monticola*, as witnessed by the great similarity of the *epigynal plate*, amongst grass on the shores of the Solway.

These I now find to be identical apparently in every respect, save their small size, with my new species *purbeckensis*.

It is, of course, possible that more specimens might prove the distinctness of the two species; but at present I am unable to find any character which I can consider sufficient for the purpose. There is, however, nothing extraordinary in the difference in size, for there is considerable difference between the climate of Poole Harbour and that of the more or less inhospitable shores of the Solway.

Pardosa palustris, Linn. (Pl. IV. figs. 6, 7, 8, 12.)

Male, ceph. 2·5, abd. 2·75 millim.; female, ceph. 3, abd. 3·5 millim.

The male may be instantly recognized by the pale yellow, tumid, dilate protarsi and tarsi of the first pair of legs, these being clothed with long silky hairs, but no long bristles. The central spur of the palpal organs has a very distinct long cusp at the base, similar to that of *purbeckensis*, but a little more curved.

The *epigyne* is very variable.

Abundant.

Pardosa monticola, Clerck.

(Pl. IV. figs. 5, 7, 8, 11.)

Male, ceph. 2·5, abd. 2·75 millim.; female, ceph. 3, abd. 3·5 millim.

The protarsi and tarsi of first pair of legs of male not tumid or dilate, clothed very sparingly with short silky hairs; no bristles. *Epigyne* very variable; posterior angles, however, always *procurved*, *i. e.* curved forwards.

Abundant.

Pardosa herbigrada, Blk.

(Pl. IV. figs. 2, 7, 8, 10.)

Male, ceph. 2·5, abd. 2·75 millim.; female, ceph. 3, abd. 4 millim.

Protarsi and tarsi of first pair of legs of male tumid, dilate, clothed with silky hairs. Central band on cephalothorax constricted about the middle and dilated again at the caput. *Epigyne* very large.

Rare.

The following table, though by no means exhausting the characters, nor based on those only which are strictly structural, will, I believe, be of some practical use:—

Males.

- A. Protarsi and tarsi of first pair of legs incrassate.
 - 1. Cephalothoracic bands as in female *herbigrada*, Blk.
 - 2. Cephalothoracic bands as in female *palustris*, Linn.
- B. Protarsi and tarsi not dilate, slender.
 - 1. Protarsi i. furnished with numerous very long bristles. Size much larger, 3 lines .. *purbeckensis*, F. Cb.
 - 2. Protarsi i. furnished with short hairs. Size much smaller, $1\frac{1}{2}$ lines *monticola*, Clk.

Females.

- A. Central white band on cephalothorax constricted towards caput and again dilated at its termination. Marginal band very broad *herbigrada*, Blk.
- B. Central yellow band finely attenuate towards caput. Marginal band very narrow.
 - a. Posterior angles of epigynal plate produced and procurved.
 - 1. Size much larger, 4 lines. Black. *purbeckensis*, F. Cb.
 - 2. Size much smaller, $2\frac{1}{2}$ lines. Grey; abdomen with white spots *monticola*, Clk.
 - b. Posterior angles of epigynal plate uniformly rounded, often dilate, but never pointed, recurved, or procurved *palustris*, Linn.

Synonymy.

Pardosa palustris, Linn. 1758.

Lycosa exigua, Bl. 1861 (in part).

Lycosa tarsalis, L. K. 1870.

Lycosa palustris, Thor. 1872.

Pardosa palustris, Sim. 1876.

Lycosa palustris, Cambr. 1881, Kulez. 1892.

Pardosa monticola, Clk. 1757.

Lycosa exigua, Bl. 1861 (in part).

Lycosa monticola, L. K. 1870, Thor. 1872, Cambr. 1881, Kulez. 1892.

Pardosa monticola. Sim. 1876.

Pardosa herbigrada, Blk.

Lycosa herbigrada, Bl. 1861.

Genus *PORRHOMMA*, Sim.

Of the eight species noted under this genus in my last communication (Ann. & Mag. Nat. Hist. ser. 6, vol. xiii., Jan. 1894), two at least must be relegated to separate genera.

The species *P. montigena* seems, according to Prof. Kulcznski, not to be *P. montigena*, Sim., but a distinct species. It will therefore resume its specific name *niger*, F. Cb., and enter the genus *Oreoneta*, which this author has formed for its reception.

The species described as *P. adipatum*, L. K., unless there should appear any sufficient reason to the contrary, will fall under the genus *Macrargus*, Dahl.

Thus limited, the genus *Porrhomma* embraces a fairly homogeneous group of spiders.

By an oversight in my last paper a species is described under genus *Porrhomma* (not *Linyphia*, as quoted by Messrs. Evans and Carpenter *), with the specific name *Meadii*. This species had already been described as *microphthalma*, but my anxiety to honour the learned dipterologist who virtually discovered the species caused me to forget the honour due to the author who had long ago given to it the name *microphthalma*; and I have to thank Messrs. Evans and Carpenter for kindly pointing out this error.

The synonymy of this species should therefore run as follows:—

Porrhomma microphthalmum, Cb.

Neriene errans, Blk. (in part), 1864.

Linyphia microphthalma, Cb. Spid. Dor. 1879.

Linyphia incerta, Cb. Spid. Dor. 1879.

Linyphia decens, Cb. Spid. Dor. 1879.

Porrhomma Meadii, F. Cb. 1894.

Porrhomma egeria, Sim. (Pl. IV. figs. 13, 14.)

Length of male 2·5 millim.; female 3 millim. or 1½ line.

Cephalothorax, *falces*, *legs*, and *palpi* bright orange-red. Abdomen dull olive-green or white.

Legs furnished with long spines and hairs similar to those of *microphthalmum*, save those on the femora.

Femora i. with three spines, two on the inner side and a third in front towards the apex. Femora ii. with one single spine about the middle; none on femora iii. and iv.

The female sometimes has four spines on femora i. and two on femora ii., while one specimen had one on femora iii.

Protarsi without any spines.

Caput very high, convex, clothed with short hairs.

Eyes very minute, in some cases almost obsolete. In several specimens of both sexes the central anterior pair of

* 'A List of the Spiders of Edinburgh,' 1894, p. 560, note.

eyes had become entirely atrophied, and not a trace of them remained; in some cases the posterior centrals had disappeared, while in others the central anteriors had coalesced, forming an indistinct dark spot. Anterior row curved, convexity forward; centrals almost in contact, four diameters from laterals. Posterior row curved, convexity backward; centrals two diameters apart, five from the laterals; the four centrals forming a quadrangle a little longer than broad.

Clypeus quite twice the width of the ocular area, clothed with numerous short hairs directed forwards.

This species is closely allied to *myops* and *oblongum*, but can easily be distinguished from either. In *myops* femora i. has two spines only and in *oblongum* one only.

I should myself have been very much inclined to have considered these spiders identical with *myops*, had not M. E. Simon himself, to whom I submitted some examples, declared that they were without doubt *egeria*. I have, however, never seen the male of *myops*, and only a single specimen of the female.

Numerous specimens of both sexes, adult and immature, were taken by myself in the large cavern near Wells called Wookey Hole, in May 1894. It is probable that no daylight has penetrated its gloomy recesses for many thousand years; hence the degeneration of the visual organs in these spiders.

The first British specimens were taken near Rosslyn, in Scotland, in 1893 and 1894 ('A List of the Spiders of Edinburgh,' 1894, p. 560).

For the table of specific characters of *Porrhomma*, vide Ann. & Mag. Nat. Hist., Jan. 1894, p. 100, correcting as follows, to include *egeria* :—

- b. Anterior row of eyes strongly curved, convexity forwards. Eyes of both rows very small and wide apart. Central posteriors two diameters apart, four from laterals.
- 1. Femora i. with two or more spines. Clypeus at least twice the height of the ocular area.
 - a*. Femora i. with two spines, ii. with one spine *P. myops*, Sim.
 - b*. Femora i. with three spines, ii. with one spine *P. egeria*, Sim.
- 2. Femora i. with a single spine only, ii. with none. Clypeus only one quarter higher than the ocular area. *P. oblongum*, Cb.

Genus TETRAGNATHA, Latr.

Tetragnatha pinicola, L. K.

Males were taken by myself in the Lake Districts in

1892; males and females were also found in the collection of the Rev. O. Pickard-Cambridge.

Tetragnatha Solandrii, Scop.

Taken abundantly at Morden Park during the summer of 1894; specimens were found also in all the collections submitted to me from England, Ireland, and Scotland.

Tetragnatha nigrita, Lendl.

This fine species occurred only in the collection of the Rev. O. Pickard-Cambridge. Males and females.

Tetragnatha obtusa, L. K.

A few examples of this variable species occurred in my own collection and that of the Rev. O. Pickard-Cambridge.

These four species are now recorded for the first time as indigenous to Britain.

Genus LEPTYPHANTES, Menge.

Leptyphantes tenebricola, Wid.

An adult male was found in a tube marked "n. sp.?" taken at Armathwaite, near Carlisle, which certainly belongs to this species as diagnosed and figured by W. Kuleznski in 'Symb. ad Faunam Arach. Tirolensem,' 1887, p. 320, pl. vii. figs. 34, 35. Four or five males were also found in a collection from Scotland.

Notes on Rare Species, and Remarks on Synonyms.

Pardosa riparia, Clk.

The examination of numbers of specimens of *L. prativaga*, and the comparison of them with specimens taken to be *riparia*, C. L. K., has convinced me that we have not this latter species in England, but only the one species *prativaga*.

Immense numbers of this species were met with on May 15, 1894, along the western shores of Poole Harbour, and many others were taken about the same time in other parts of the country.

Drassus minusculus, L. K.

Drassus delinquens, Cb. Spid. Dor. p. 21.

Numerous specimens of both sexes were met with on May 17, 1894, under dry seaweed on the shores of Littlesea, near Studland.

Coryphæus glabriceps, F. Cb.

M. Simon, who has examined the type specimen, declares this species to be identical with his *Gongylidium distinctum*.

Marptusa muscosa, Clk.

Numerous examples of both sexes were taken under the stones of walls upon the downs between St. Aldhelm's Head and Swanage, in Sept. 1894. They were then found in all stages of growth, crouching beneath a small white silken sheet, the latter having an orifice at each end.

Tmeticus niger, F. Cb. (Ann. & Mag. N. H., Jan. 1891).

The synonymy of this species stands as follows :—

Genus OREONETA, Kulcznski, 1894.

Oreoneta niger, F. Cb.

Tmeticus niger, F. Cb. 1891.

Porrhomma nigrum, O. P. C., Proc. Dor. Nat. Hist. Soc. 1891.

Porrhomma montigena, F. Cb. 1894.

Microneta clypeata, F. Cb. (Ann. & Mag. N. H., Jan. 1894).

This species is identical with *Microneta decora*, Cb. (Trans. Linn. Soc. xxvii.).

Dysdera crocota, C. K.

Males and females of this fine spider were taken at Swanage on May 3rd, near Peveril Point.

Agræca inopina, Cb.

Adult females were taken near Peveril Point on May 3rd.

Linyphia furtiva, Cb.

A single adult male was taken in the Branksome Woods, Bournemouth, on June 12th; numerous adult females were taken near Bloxworth in July.

Scytodes thoracica, Latr.

Two young females were taken on an outhouse in Guernsey by Mr. W. A. Luff in 1894.

Salticus formicarius, Wlk.

An adult male was sent me by Mr. Luff during the summer; taken by Mr. Marquand in Guernsey.

Species new to Science.

<i>Agræca littoralis</i> , F. Cb., p. 26. Pl. III.		<i>Pardosa purbeckensis</i> , F. Cb., p. 32. Pl. IV.
<i>Lycosa spinipalpis</i> , F. Cb., p. 28. Pl. III.		

Species added to the British List since January 1894.

<i>Lycosa robusta</i> , Sim., p. 30. Pl. III.		<i>Porrhomma egerii</i> , Sim., p. 36. Pl. IV.
<i>Tetragnatha Solandrii</i> , Scop., p. 38.		<i>Leptyphantes tenebricola</i> , Wid., p. 38.
— <i>pinicola</i> , L. K., p. 37.		
— <i>obtusa</i> , C. K., p. 38.		
— <i>nigrita</i> , Lendl., p. 38.		

Species noted or figured.

<i>Lycosa terricola</i> , Th., p. 30. Pl. III.		<i>Agræca inopina</i> , Cb., p. 39.
— <i>ruricola</i> , De Geer, p. 30. Pl. III.		<i>Linyphia furtiva</i> , p. 39.
<i>Pardosa monticola</i> , Clk., p. 34. Pl. IV.		<i>Coryphæus glabriceps</i> , F. Cb. p. 39.
— <i>palustris</i> , Linn., p. 34. Pl. IV.		<i>Porrhomma montigena</i> , Sim., p. 36.
— <i>herbigrada</i> , Blk., p. 34. Pl. IV.		<i>Miconeta clypeata</i> , F. Cb., p. 39.
<i>Dysdera crocota</i> , p. 39.		<i>Marptusa muscosa</i> , p. 39.
<i>Drassus minusculus</i> , p. 38.		<i>Scytodes thoracica</i> , Latr., p. 39.
		<i>Salticus formicarius</i> , Wlk., p. 39.

EXPLANATION OF THE PLATES.

PLATE III.

- Fig. 1. *Lycosa ruricola*, De Geer. Palpus of male from outside.
 Fig. 2. *Lycosa terricola*, Th. Palpus of male from outside.
 Fig. 3. *Lycosa robusta*, Sim. Palpus of male from outside.
 Fig. 4. *Lycosa spinipalpis*, sp. n. Palpus of male from outside.
 Fig. 5. Ditto. Female, full figure.
 Fig. 6. *Lycosa ruricola*, De Geer. Female; epigyne.
 Fig. 7. *Lycosa terricola*, Th. Female; epigyne.
 Fig. 8. *Lycosa robusta*, Sim. Female; epigyne.
 Fig. 9. *Lycosa spinipalpis*, sp. n. Female; epigyne.
 Fig. 10. *Lycosa ruricola*, De Geer. Male; right falx.
 Fig. 11. *Lycosa terricola, spinipalpis, robusta*. Male; right falx.
 Fig. 12. *Lycosa robusta*, Sim. Male; tarsus i.
 Fig. 13. *Lycosa ruricola*, De Geer. Male; protarsus and tarsus i.
 Fig. 14. *Lycosa terricola, spinipalpis*. Male; protarsus and tarsus i.
 Fig. 15. *Agræca littoralis*, sp. n.
 a. Female, full figure.
 b. Female; epigyne.
 c. Female; eyes and clypeus.
 d. Female; falces.
 e. Female; maxillæ and labium.

PLATE IV.

- Fig. 1. *Pardosa purbeckensis*, sp. n.
 a. Palpus of male from outside. *b*, bulb; *c.s.*, central spur; *d*, apical lamina; *e*, lateral lamina.
 b. Palpus of male from inside.
- Fig. 2. *Pardosa herbigrada*, Blk. Palpus of male from outside.
- Fig. 3. Ditto. Palpus of male from beneath.
- Fig. 4. *Pardosa purbeckensis*, sp. n. Palpus of male from beneath.
- Fig. 5. *Pardosa monticola*, Clk. Palpus of male from outside and beneath.
- Fig. 6. *Pardosa palustris*, Linn. Palpus of male from beneath.
- Fig. 7.
 a. *Pardosa purbeckensis*, sp. n. Palpus; central spur.
 b. *Pardosa palustris*, Linn. Palpus; central spur.
 c. *Pardosa monticola*, Clk. Palpus; central spur.
 d. *Pardosa herbigrada*, Blk. Palpus; central spur.
- Fig. 8.
 a. *Pardosa purbeckensis*, sp. n. Protarsus and tarsus i.
 b. *Pardosa palustris*, Linn. Protarsus and tarsus i.
 c. *Pardosa monticola*, Clk. Protarsus and tarsus i.
 d. *Pardosa herbigrada*, Blk. Protarsus and tarsus i.
- Fig. 9. *Pardosa purbeckensis*. Female; epigyne.
- Fig. 10. *Pardosa herbigrada*, Blk. Female; epigyne.
- Fig. 11. *Pardosa monticola*, Clk. Female; epigyne.
- Fig. 12. *Pardosa palustris*, Linn. Female; epigyne.
- Fig. 13. *Porrhomma egeria*, Sim.
 a. Female; central anterior eyes atrophied.
 b. Female; central posterior eyes atrophied.
 c. Male; eyes and clypeus, with relative widths.
 d.—1. Left palpus of male. 2. Falciform process.
- Fig. 14. *Porrhomma egeria*, Sim.
 a. Female; epigyne.
 b. Female; femur i. with three characteristic spines.

VI.—*Descriptions of some new Species of Heterocera from the Eastern Islands and Tropical America.* By HERBERT DRUCE, F.L.S.

Agaristidæ.

Agarista proerosia, sp. n.

Male.—Primaries rich reddish brown, crossed about the middle from the costal margin almost to the anal angle by a rather wide cream-coloured band; the veins and several indistinct markings near the base thickly irrorated with metallic steel-coloured scales; the fringe black: secondaries black-brown; a small space on the anal angle cream-colour; the fringe white. Underside of both wings brown, with the white markings as above. Head, thorax, and abdomen